



ELEKTRONIK SYSTEM

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III LAMP X-RAY SCANNER ELEKTRON-SXRF-2025III

- ▶ The X-Ray scanner is designed for the most demanding customers, dedicated to examining products in an upright position, i.e. bottles, jars with metal caps, tall cans, etc.
- ▶ A highly advanced analysis system using 3 radiation sources and 3 imaging systems provides the highest level of protection for the product examined in the upright position.
- ▶ Non-regular shape and defects of the product packaging do not affect the detection level.
- ▶ By x-raying the product from three different angles, in two stages and with two lamps, the system eliminates as far as possible dead spots, which most often occur at the bottom of the jar or bottle and under the cap.
- ▶ The high-powered ionising radiation lamps used power, ensure longer service life of the entire X-Ray scanner.



ARTIFICIAL INTELLIGENCE - OPTIONAL

X-Ray scanner equipped with artificial intelligence support, which much more accurately than a human analysing the comparison data with tremendous computational speed. The AI robot learns to recognise and eliminate foreign bodies, errors, damage, deficiencies much more accurately than competitor scanners.

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|---|---|
| Model | ELEKTRON-SXRF |
| Three X-Ray lamps | MAX. 480W/120kV |
| Maximum width of the tested product | 200 mm |
| Maximum height of the tested product | 250 mm |
| The smallest possible detectable testers | Steel ball from 0.5 mm Steel wire from 0.4*2mm Glass/Ceramic ball from 1.5 mm |
| Transporter speed | 10-50 m/min |
| Operating system | Windows 7 |
| Radiation protection | Protective tunnel |
| External radiation | < 1 µSv/h |
| Tightness class | IP66 |
| Working temperature | From -10 to +40 °C |
| Operating humidity | 30 ~ 90 % |
| Cooling | Industrial air conditioner |
| Air pressure | 0,8 Mpa |
| Power supply | 3,5 kW |
| Material | Glass-blasted stainless steel |

MAIN FEATURES

- Three-lamp X-Ray scanner with three receivers at different angles.
- Touchscreen for easy operation and management of functions (possibility to fine-tune manual parameter settings).
- Detection of glass in glass (bottles, jars) and metal in metal packaging (cans).
- Possibility of filling level testing.
- Possibility of applying a mask to exclude parts of the package not subject to inspection, e.g. bottle wall, increasing the detection level.
- High conveyor belt speed allows large volumes of product to be tested.
- Intuitive and very simple operation.
- Remote 24-hour service support regardless of location.

SYSTEM FUNCTIONS

- 2 password-protected access levels.
- The operator can manually adjust the settings.
- Detection of defective products with damage (deformed product, crumpled can, missing or defective product).
- Optional product weight check - the X-Ray scanner detects products with abnormal weight from as little as 1-5 g depending on product type.
- Quick and precise separation of contaminated or defective product.
- Automatic diagnostics and safety control system (detection of an open inspection door in the unit and immediate shutdown of the unit and switching off of the X- Ray tube radiation).

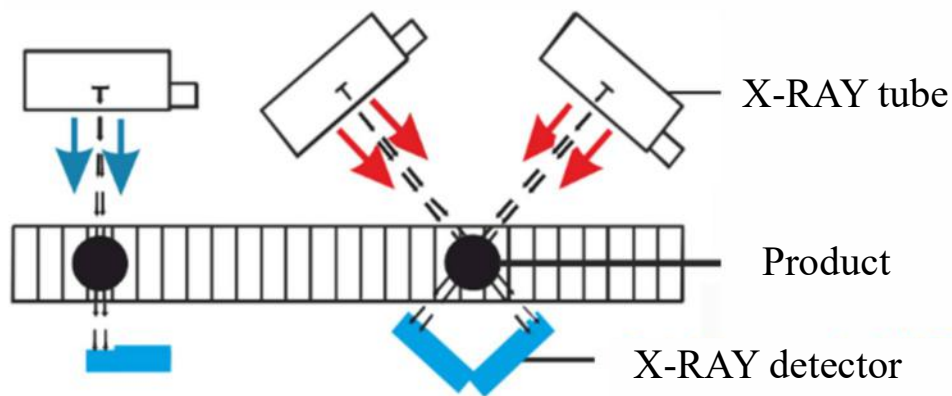
„FROST” SYSTEM

In the low temperature zone, the X-Ray scanner can be equipped with a feature not found in other devices, **"FROST" system** - temperature and humidity control system inside control system housings. A system that protects electronic circuits against moisture, cold and sudden temperature changes while washing. Protects against moisture absorption inside (e.g. a cold machine washed with hot water).

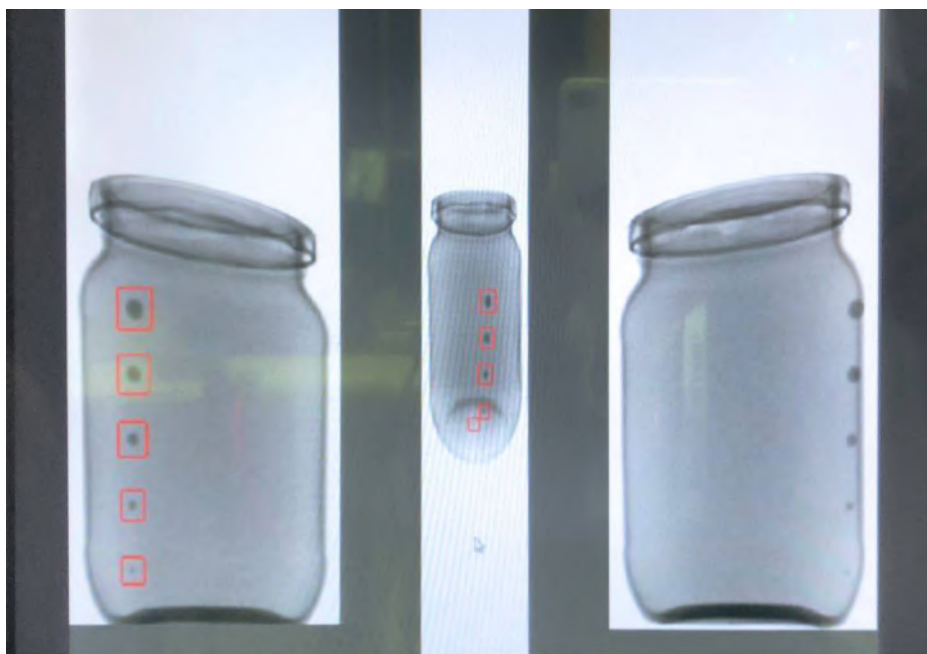
LIST OF COMPONENTS

| FUNCTION | NAME | PRODUCER |
|---------------------------------|----------------------------|-------------------------|
| X-Ray source | X-Ray generator | VJ TECHNOLOGIES |
| X-Ray receiver | X-Ray detector | DETECTION TECHNOLOGY |
| Device management | 17" touch monitor | ADVANTECH |
| Data processing | Industrial computer | ADVANTECH |
| Temperature and wetness control | Air conditioner | RITTAL |
| Conveyor belt drive | Engine wiht gear | ORIENTAL MOTOR |
| Speed regulation | Engine controller | ORIENTAL MOTOR |
| Electric protection | Miniature circuit breakers | SCHNEIDER ELECTRIC /ABB |
| Connection between devices | Military connectors | PLT |
| Safety management | Limit switches | OMRON |
| Automation management | PLC driver | SCHNEIDER ELECTRIC |
| Warning information | Optical-acoustic signaller | WERMA |

LAMP SETUP DIAGRAM



SCANNER INSPECTION IMAGE X- RAY ELECTRON-SXRF-2025III



GLASS
from 2,0mm



CERAMICS
from 3,0mm



3D DRAWING OF ELEKTRON-SXRF-2025III

